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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,702	02/25/2000	Toshikazu Mukaihara	00120/HG	7271

7590 12/06/2001
Frishauf Holtz Goodman Langer & Chick PC
767 Third Avenue
25th Floor
New York, NY 10017

EXAMINER

FLORES RUIZ, DELMA R

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/513,702	Applicant(s) MUKAIHARA ET AL.	
	Examiner Delma R. Flores Ruiz	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Specification***

The disclosure is objected to because of the following informalities: The drawings 1 – 5, as described by the applicant at the disclosure, seem to be illustrations of apparatus of the prior art instead of the disclosed invention or improvement because the description for these drawings has been located in the general description of the common art. However, the description for these drawings has also been located in Detailed Description of the Invention. The examiner requires if the drawings mentioned above are an improvement or prior art and to correct the specification accordingly, in order to consider it properly and distinguish the invention intended to be illustrated by the applicant. Clarification is required

Drawings

Figures 1 – 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). The description provided for Figures 1 – 5 in the *Brief Description of the Drawings* section of the Specification should be corrected to set forth that such drawings illustrate an apparatus of the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art as shown in Figs 1 – 2 and detailed in specification at pages 1 – 6.

Regarding claim 1 – 8 applicant's admitted prior art disclose a semiconductor laser device (A) comprising: a laminated structure of a semiconductor, material including an active layer (3, In the application on page 2, lines 2 – 4) formed of a quantum well structure; a low-reflection film (9, In the application on page 2, line 20) formed on one end face of the structure; a high-reflection (10, In the application on page 2, lines 22 – 23) formed on the other end face of the structure; device has a transverse light confinement structure with the transverse refractive index difference of about 1×10^{-2} for oscillation mode, and active layer is formed of one or two quantum well structures (3, In the application on page 2, lines 2 – 4). Applicants admitted prior art

Art Unit: 2877

discloses the claimed invention except for the cavity length of the device being 1,200 μm or more, the reflectance of said low-reflection film on the one end face is 5% or less, and the coefficient of light confinement to the active layer range from 1% to 2%. It would have been obvious to one of ordinary skill in the art at the time the invention was made to reflectance of said the cavity length of the device being 1,200 μm or more, low-reflection film on the one end face is 5% or less, and the coefficient of light confinement to the active layer range from 1% to 2%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Morgan, (5,978,401).


Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.

Art Unit: 2877

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Delma R. Flores Ruiz
Examiner
Art Unit 2877


Frank G. Font
Supervisor Patent Examiner
Art Unit 2877

Drfr
November 30, 2001